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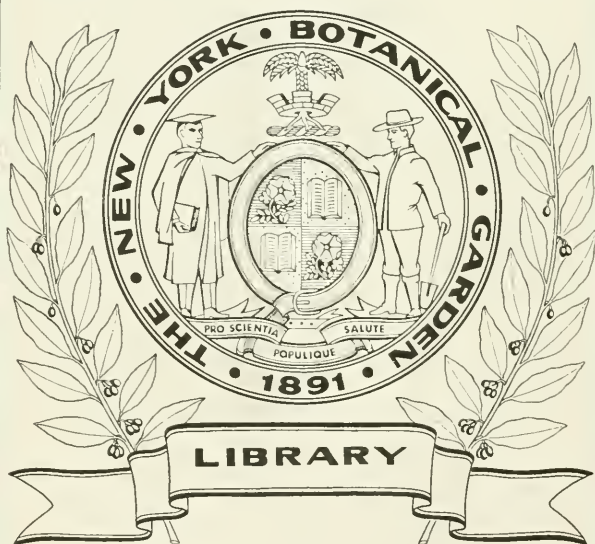
CLUTE, W. N.

THE FLORA OF THE UPPER SUS-
QUEHANNA AND ITS TRIBUTARIES.

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Wm. Clute

THE FLORA OF THE UPPER SUSQUEHANNA AND ITS TRIBUTARIES



FIRST SUPPLEMENT

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Binghamton, N. Y.
Willard N. Clute & Co.
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PREFACE.

THE two seasons that have passed since the publication of the FLORA OF THE UPPER SUSQUEHANNA have brought to our knowledge a considerable number of species before unknown to the region, as well as extended the range of many rare ones. It having now become necessary to issue a second edition, advantage has been taken of the opportunity to include these additions and changes, thus placing the volume in accord with our present knowledge. This material will be found in the following pages arranged under two heads: (1) Species New to the Flora, and (2) Additional Stations.

The absence of earlier lists of plants made the first issue of this book somewhat in the nature of a preliminary survey. It was not expected that all the species had been included, nor do we believe that those now added—which brings the total up to 1,201 species—completes the list. Enough have been discovered, however, to show that our flora is as rich as any other in the State, and to warrant further explorations of the whole field. The author will be glad to receive further notes on the plants of our region and will give such notes credit in future supplements. Some of our observers are at present working on the mosses and hepatics, and it is expected that the next Supplement will contain lists of these with notes.

All the species in the present list, about whose identity there could be the slightest question, have been seen by the author and in critical cases have also been submitted to acknowledged authorities for verification. The specimens themselves are deposited in the New York State Herbarium, the Herbarium of Lafayette College, or the Herbarium of the Field Columbian Museum.

I must again express my indebtedness to Messrs. Graves, Fenno, Barbour and Lucy, for their continued coöperation in exploring this region. My thanks are also due to Miss Elsie Murray, who has sent me an interesting list of species from the vicinity of Athens, Pa., and to several others mentioned in the text, who have kindly contributed notes on single species.

WILLARD N. CLUTE.

Binghamton, N. Y., Feb. 15, 1901.

SPECIES NEW TO THE FLORA.

Arabis hirsuta (L.) Scop. Found sparingly in dry soil at Apalachin, *Fenno*.

Sisymbrium altissimum L. Abundant in fields west of Binghamton. Far out of this plant's range, *Clute*.

Saponaria Vaccaria L. Along the D. & H. Railroad near Binghamton, *W. R. Maxon*. Apalachin, *Fenno*.

Arenaria stricta Michx. North of Elmira, *Lucy*. (*A Michauxii* Hook.)

Cerastium arvense L. Sayre; along the river, *Barbour*.

Cerastium arvense oblongifolium (Torr.) Holl. & Britt. Dry banks at Barton; common, *Fenno*.

Viola villosa Walt. Dry bank at Apalachin, *Fenno*.

Euonymus Europæus L. Plentiful on the sites of old dwellings in Tioga Co., *Fenno*.

Linum Virginianum L. Dry Fields at Campville, *Fenno*. A native species with yellow flowers.

Geranium Bicknelli Britton. Barton and Apalachin. Not uncommon, *Fenno*. This species is very likely to be mistaken for *G. Carolinianum*. Many consider it but a variety of that species.

Floerkea proserpinacoides Willd. FALSE MERMAID. Along Cayuta creek, *Millsbaugh* in *Bulletin Torrey Bot. Club*, Sept., 1889.

Ilex monticola A. Gray. Bear Swamp, the only station, *Graves*.

Lespedeza procumbens Michx. Base of hill near Apalachin in dry soil, *Fenno*. The only station.

Lespedeza frutescens (L.) Britton. Apalachin, *Fenno*. River banks at Sayre, *Barbour*. Sullivan Hill, *Lucy*. The only stations. (*L. Stuvei* var. *intermedia* Wats.)

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Cassia nictitans L. WILD SENSITIVE PLANT. Shores of the Susquehanna at Campville, *Fenno*.

Prunus pumila L. DWARF CHERRY. Wooded hillside near Athens, rare, *Murray*.

Prunus spinosa insititia (L.) A. Gray. BULLACE PLUM. Elmira, *Lucy*.

Amelanchier spicata (Lam.) Dec. Notch hill, three miles west of Barton, in dry rocky soil, *Fenno*. Elmira, *Lucy*. The only stations.

Lythrum alatum Pursh. Along the Susquehanna river at Sayre. very rare, *Barbour*.

Epilobium lineare Muhl. Swamps near Apalachin. Not common, *Fenno*.

Epilobium adenocaulon Haussk. Common throughout our range, but often mistaken for *E. coloratum*.

Symphoricarpus Symphoricarpus (L.) MacM. An escape well established near Sayre, *Farbour*. (*S. vulgaris*, Michx.)

Eupatorium sessilifolium L. UPLAND BONESET. Sayre; not common, *Barbour*. The only station. The plant has considerable resemblance to the common boneset.

Solidago cæsia axillaris (Pursh.) A. Gray. Not uncommon.

Aster curvescens Burgess. Apalachin, *Fenno*.

Aster ianthinus Burgess. Apalachin, *Fenno*.

Aster undulatus loriformis Burgess. Apalachin, *Fenno*.

Aster puniceus lucidus A. Gray. Susquehanna; not common, *Graves*.

Aster paniculatus bellidiflorus (Willd.) Burgess. Near Elmira, *Lucy*.

Aster Tradescanti L. Near Pine Valley, *Lucy*.

Aster macrophyllus sejunctus Burgess. Near Elmira, *Lucy*.

Aster sagittifolius urophyllus (Lindl.) Burgess. Near Elmira, *Lucy*.

——The asters in this list were identified by Prot. Burgess.

Anthemis arvensis L. CORN CHAMOMILE. On river flats. Common at Apalachin, Barton and Campville, *Fenno*. In the latter station more plentiful than *A. Cotula*.

Hieracium praealtum Vill. Meadows at Apalachin, not common, *Fenno*. Susquehanna, *Graves*.

Lactuca sagittifolia Ell. Near Elmira, *Lucy*.

Lobelia Dortmanna L. Spruce Pond; Coxtown Pond, *Clute*.

Asclepias pulchra Ehrh. Found at Susquehanna with *A. incarnata*, *Graves*. (*A. incarnata* var. *pulchra* Pers.)

Ipomæa hederacea Jacq. Along the river at Susquehanna, *Graves*.

Cuscuta Coryli Engelm. River flats near Campville, *Fenno*. (*C. inflexa* Engelm.)

Physalis Philadelphica Lam. Apalachin, *Fenno*.

Cymbalaria Cymbalaria (L.) Wettst. KENILWORTH IVY. For three years it has been plentiful along a stone wall on the river bank at Owego, probably naturalized, *Fenno*.

Physostegia Virginiana (L.) Benth. OBEDIENT PLANT. North of Horseheads, *Lucy*.

Scrophularia leporella Bicknell. FIGWORT. Found at several places and probably common throughout our range.

Veronica spicata L. Well established in a meadow four miles south of Apalachin, *Fenno*. Near Elmira, *Lucy*.

Veronica Anagallis-aquatica L. In a spring brook east of Campville, *Fenno*.

Monarda Clinopodia L. Plentiful along the river banks and at Mutton Hill Pond, *Fenno*.

Monarda media Willd. Near Elmira, *Lucy*. Barton, *Fenno*. (*Monarda Clinopodia* var. *media* A. Gray.)

Syringa vulgaris L. LILAC. A common shrub about the sites of old houses, often persisting or even spreading after the owners have ceased to care for it.

Utricularia cornuta Marsh Pond, Broome Co., *Clute*; *Graves*.

Plantago aristata Michx. Apalachin; common, *Fenno*. Sayre; not common, *Barbour*. (*Plantago Patagonica* Jacq. var. *Aristata* Gray.)

Toxylon pomiferum Raf. Carmalt Lake, *Fenno*. Oakland, *Graves*. Used for hedges, and now naturalized. (*Maclura aurantica* Nutt.)

Amaranthus blitoides S. Wats. Along the railroad at Campville, *Fenno*. Waste ground at Susquehanna, *Graves*.

Hicoria microcarpa (Nutt.) Britton. Apalachin, *Fenno*.

Polygonum punctatum. Common, *Fenno*, *Barbour*.

Populus deltoides Marsh. COTTONWOOD. Near Elmira, *Lucy*.

Pinus resinosa Ait. RED PINE. One specimen at Barton, *Fenno*. "Chemung Narrows," *Lucy*.

Juncus pelocarpus E. Meyer. Lake of the Meadows, *Fenno*. Marsh Pond, *Graves*.

Leptorchis liliifolia (L.) Kuntz. Near Elmira, *Lucy*. (*Liparis liliifolia* Richard.)

Stenophyllus capillaris (L.) Britton. Plentiful on the river flats opposite Apalachin, *Fenno*. (*Fimbristylis capillaris*, A. Gray.)

Scirpus Torreyi Olney. Abundant at Mutton Hill Pond, *Fenno*. Susquehanna river at Sayre; very scarce. *Barbour*.

Scirpus Americanus Pers. Along the river, *Fenno*.

Carex squarrosa L. Swampy ground, Chemung, N. Y.; scarce, *Barbour*.

Carex pedunculata Muhl. Moist rich woods, Susquehanna, *Graves*. Barton, *Fenno*.

Carex Munlenbergii Schk. Infrequent at Apalachin, *Fenno*.

Carex lupulina Bella-villa (Dewey) Bailey. Campville in swamps, *Fenno*. Identified by *Dr. T. C. Porter*.

Carex filiformis L. Swamps; Apalachin, *Fenno*. Binghamton, *Clute*.

Carex amphibola Steud. Apalachin, *Fenno*. This is out of the plant's usual range. Specimen identified by *Dr. T. C. Porter*.

Carex varia Muhl. Dry woods at Apalachin, *Fenno*. Susquehanna, *Graves*.

Carex folliculata L. Carmalt Lake, *Fenno*.

Carex pedicellata Wheeleri (Bailey) Britton. Open woods at Susquehanna, *Graves*. Verified by *Prof. Wheeler*. (*Carex communis* var. *Wheeleri* Bailey.)

Carex cristatella Britt. Apalachin, *Fenno*. Verified by *Dr. T. C. Porter*.

Carex muricata L. Apalachin on dry banks, infrequent, *Fenno*.

Carex foena Willd. Apalachin, infrequent, *Fenno*.

Carex xanthocarpa Bicknell. Apalachin, *Fenno*. Verified by *Dr. T. C. Porter*.

Panicum macrocarpum Le Conte. Apalachin, *Fenno*.

Panicum linearifolium Scrib. Apalachin, *Fenno*.

Panicum boreale Nash. Frequent in swamps; Apalachin, *Fenno*.

Aristida dichotoma Michx. Apalachin, *Fenno*.

Muhlenbergia tenuiflora (Willd.) B. S. P. Apalachin, *Fenno*.

Arrhenathecium elatius (L.) Beauv. Frequent, *Fenno*. (*A. avenaceum* Beauv.)

Festuca ovina duriuscula (L.) Hack. River banks at Apalachin, *Fenno*.

Bromus racemosus L. Dry ground; Apalachin, *Fenno*.

Calamagrostis cinnoides (Muhl.) Scrib. Campville, rare, *Fenno*.

Eragrostis capillaris (L.) Nees. Apalachin, *Fenno*.

Eragrostis pectinacea (Michx.) Stend. Apalachin, *Fenno*.

Panicularia acutiflora (Torr.) Kuntze. Frequent in swamps; Apalachin, *Fenno*.

Panicularia pallida (Torr.) Kuntze. Apalachin, *Fenno*.

Panicularia elongata (Torr.) Pursh. Near Little Meadows and at Carmalt Lake, *Fenno*.

Panicularia laxa Scrib. Apalachin, *Fenno*.

Cynosurus cristatus L. Campville, *Fenno*.

Deschampsia cæspitosa (L.) Beauv. River bank west of Campville, *Fenno*.

Pellæa atropurpurea L. WINTER BRAKE. PURPLE STEMMED CLIFF BRAKE. Cliffs at Towanda; rare, *Barbour*.

Spartina cynosuroides (L.) Willd. Sayre, Wyalusing, Horseheads, *Barbour*. Frequent along the river, *Fenno*, Beaver Dam, *Lucy*.

Isoetes echinospora Braunii (Durien) Engel. Cinnamon Lake, *Barbour*. Coxtown Pond, Carmalt Lake and Wrighter Lake; common, *Clute*.

Lycopodium inundatum L. Marsh Pond; rare, *Clute*.

ADDITIONAL STATIONS.

Atragene Americana. Spanish Hill, Waverly and Athens, *Barbour*.

Anemone cylindrica. Near Barton, rare, *Fenno*.

Ranunculus reptans. Along the Susquehanna at Sayre, scarce, *Barbour*. Athens, *Murray*.

Ranunculus bulbosus. In wet meadows at Athens, not common, *Murray*.

Ranunculus hispidus Michx. All the specimens in our range referred to *R. fascicularis*, are without doubt, properly placed under this species.

Liriodendron tulipifera. Now known to be indigenous in Susquehanna county, *Graves*.

Chelidonium majus. Tioga county, *Fenno*.

Adlumia fungosa. Abundant at the "Narrows" west of Owego; also at Tioga Center, *Fenno*. Lockwood, N. Y.; Athens, Pa., scarce, *Barbour*.

Capnoides sempervirens. Bare rocks at Mt. Pisgah, *Murray*.

Fumaria officinalis. Chemung, N. Y., *Barbour*.

Cardamine Pennsylvanica. Common in Tioga county, *Fenno*.

Arabis lævigata. River banks, Apalachin and Barton, *Fenno*. Athens and Sayre, *Barbour*.

Arabis dentata. River shore at Barton, plentiful, *Fenno*. Sayre, *Barbour*.

Arabis glabra. Apalachin, *Fenno*. Elmira, *Lucy*.

Arabis lyrata. River banks, plentiful, *Fenno*. Rock hillsides at Athens, *Murray*. Sheshequin Narrows, Bradford county, *Barbour*. Mt. Zoar, *Lucy*.

Roripa palustris. Now reported from Broome and Tioga counties.

Lepidium campestre. This species is becoming common in nearly all parts of our range.

Polanisia graveolens. Along roadsides west of Waverly, *Barbour*. Railroad embankment near Binghamton, *W. R. Maxon*.

Viola ovata Nutt. The specimens formerly referred to *V. sagittata* are more correctly placed here. The true *sagittata* does not appear to have been found in our region. *Ovata* is fairly common throughout.

Viola rotundifolia. Has been found to be plentiful in Susquehanna county, *Graves*.

Viola scabriuscula. Further explorations have shown this species to be tolerably common in our range.

Viola rostrata. Waverly and Athens, not common, *Barbour*.

Silene vulgaris. Sayre, *Barbour*. Plentiful, *Graves*.

Silene antirrhina. Waste places, common, *Fenno*. Sayre, *Barbour*.

Silene noctiflora. Now added from their stations by *Fenno*, *Barbour* and *Murray*.

Arenaria lateriflora. Apalachin, *Fenno*.

Arenaria serpyllifolia. Common in Tioga county, *Fenno*. Sayre, *Barbour*.

Alsine borealis. Infrequent along Apalachin creek, *Fenno*.

Alsine graminea. Becoming common throughout.

Cerastium longipedunculatum. Abundant on river flats at Barton, *Fenno*.

Claytonia Caroliniana. Susquehanna county, plentiful, *Graves*.

Hypericum Virginicum. Cinnamon Lake, *Lucy*. Sayre and Newark Valley, *Barbour*.

Matva sylvestris. Susquehanna county, *Graves*. Tioga county, *Fenno*.

Abutilon Abutilon. This plant is fast becoming common in the main valley of the Susquehanna.

Linum usitatissimum. Susquehanna, along the railway, *Graves*.

- Rhus copallina*. Hillside near Lake of the Meadows, *Clute*.
- Geranium Robertianum*. Newark Valley and VanEtten, plentiful. Waverly, not common, *Barbour*.
- Geranium Carolinianum*. Found sparingly at Apalachin, *Fenno*. Sayre, rare, *Barbour*. Athens, *Murray*.
- Oxalis violacea*. Athens, *Murray*. Sayre, *Barbour*.
- Rhamnus alnifolia*. Swamp, north of Barton, *Fenno*.
- Rhamnus cathartica*. Carmalt Lake, plentiful, *Fenno*.
- Vitis vulpina*. Sayre, *Barbour*.
- Polygala Senega*. This species has now been found at Apalachin, Barton and Owego, *Fenno*.
- Polygala viridescens*. Plentiful east of Hallstead, *Clute*.
- Astragalus Carolinensis* L. Near Lanesboro. Rare, *Graves*.
- Trifolium arvense*. Hill near Sayre, plentiful, *Barbour*.
- Trifolium incarnatum*. Sayre, scarce, *Barbour*.
- Medicago sativa*. Sayre, not common, *Barbour*. Meadows, frequent, *Fenno*. Athens, *Murray*.
- Medicago lupulina*. Sayre, not common, *Barbour*. Common along the railroad, *Fenno*. Abundant, *Clute*. This plant closely resembles *Trifolium procumbens* and is doubtless often mistaken for it.
- Meibomia rotundifolia*. Wooded roadside near Campville, *Fenno*.
- Meibomia Dillenii*. Barton, *Fenno*. Sayre, *Barbour*.
- Lespedeza capitata*. Common at Apalachin near the river, *Fenno*.
- Lathyrus ochroleucus*. Common in damp shades at Apalachin and Barton, *Fenno*. Sayre, VanEtten and Athens, *Barbour*.
- Falcata comosa*. A form of this is doubtfully referred to *F. Pitcheri*. It resembles *Comosa* except that the rachids and inflorescence are clothed with deep brown hairs. Flowers above ground usually fertile.
- Cassia Marylandica*. Swamp two miles north of Sayre, rare, *Barbour*.
- Opulaster opulifolius*. Sayre, plentiful, *Barbour*.

- Spiræa tomentosa*. East of Campville, not common, *Fenno*.
- Potentilla arguta*. Two miles north of Sayre, very rare, *Barbour*. Frequent at Barton, *Fenno*.
- Sorbus Americana*. Found wild in a swamp north of Barton, *Fenno*.
- Cratægus tomentosa*. Barton, *Fenno*.
- Amelanchier Botryapium*. In Tioga county, *Fenno*. Waverly, *Barbour*.
- Ribes rotundifolium*. North of Barton, *Fenno*.
- Sedum acre*. Rare at Athens, *Murray*.
- Sedum ternatum*. Rare at Athens, *Murray*.
- Linnæa borealis*. Wooded hilltops, *Murray*. Apalachin, *Fenno*.
- Drosera rotundifolia*. Cinnamon Lake, *Lucy* and *Barbour*.
- Drosera intermedia*. Marsh Pond; Lake of the Meadows, plentiful, *Clute*.
- Decodon verticillata*. Cinnamon Lake, *Lucy* and *Barbour*.
- Ludwigia palustris*. Common in Tioga county, *Fenno*.
- Aralia hispida*. Near Apalachin, *Fenno*.
- Galium pilosum*. VanEtten, *Barbour*. Apalachin, *Fenno*.
- Valerianella chenopodifolia*. River meadows at Apalachin, *Fenno*.
- Solidago squarrosa*. Common near the river in Susquehanna county, *Graves*.
- Solidago patula*. Swamp near Susquehanna, *Graves*. Apalachin, *Fenno*.
- Solidago ulmifolia*. "Table Rock," Towanda, *Barbour*.
- Sericocarpus asteroides*. Newark Valley and hills north of Sayre, not common, *Barbour*. Near Campville, frequent, *Fenno*.
- Aster cordifolius polycephalus*. Sayre, not common, *Barbour*.
- Aster ericoides*. Waverly, Sayre and Berkshire, *Barbour*.

Aster umbellatus. Sayre, Newark Valley, rare, *Barbour*.
Common in swamps at Apalachin, *Fenno*.

Polymnia Canadensis. "Table Rock," Towanda; Athens, scarce,
Barbour.

Aster infirmus. Sayre and Newark Valley, not common, *Barbour*.
Frequent, *Fenno*.

Helianthus strumosus. Common at Sayre, *Barbour*.

Galinsoga parviflora. Sayre, rare; Towanda and Waverly,
plentiful, *Barbour*. Athens, common, *Murray*.

Cacalia suaveolens. Sayre, scarce, *Barbour*.

Lactuca Scariola. Fast spreading in Susquehanna county
Graves. Apalachin and Campville, *Fenno*.

Lobelia Kalmii. Swamp at Sayre, *Barbour*.

Kalmia glauca. Spruce Pond, Wayne county; Marsh Pond,
Broome county, *Clute*.

Kalmia angustifolia. LaGrange, *Orie E. Croop*.

Azalia canescens. Apalachin, plentiful, *Fenno*.

Ledum Grænlandicum. Bog near Ararat Summit, *Graves*.

Vaccinium atrococcum. Mutton Hill Pond, *Fenno*.

Rhododendron maximum. Spruce Pond; ravine near Susque-
hanna, plentiful, *Clute*.

Chimaphila maculata. Near Sayre, scarce, *Barbour*.

Naumburgia thyrsiflora. Van Etten swamp, *Barbour*.

Cuscuta Epithymum. Farm of H. Macumber, four miles north
of Binghamton. June, 1893. *Prof. C. O. Thurston*.

Anagallis arvensis. Athens, rare, *Murray*.

Gentiana crinita. Abundant at one station near Apalachin,
Fenno.

Lithospermum arvense. Sayre, *Barbour*.

Echium vulgare. Has appeared in Susquehanna along the rail-
road, *Graves*.

Solanum nigrum. Athens, common, *Murray*.

Physalis heterophylla Nees. This is *P. Virginianum* of the first edition. It has now been found at Apalachin, *Fenno*.

Ilysanthes gratioides. Common at Apalachin, *Fenno*.

Veronica Byzantina. Waste places at Apalachin, *Fenno*.

Utricularia vulgaris. River at Apalachin, *Fenno*.

Kallia flexuosa. Near Sayre, rare, *Barbour*.

Anychia dichotoma. Campville, *Fenno*.

Chenopodium capitatum. Mt. Pisgah, *Murray*.

Atriplex hastata. Waverly, *Barbour*. Binghamton, abundant, *Clute*.

Rumex Patientia. Sayre, *Barbour*.

Rumex Britannica. Swamp two miles north of Sayre, scarce, *Barbour*. Plentiful at Barton and Apalachin, *Fenno*.

Polygonum emersum. River shore at Sayre, not abundant, *Barbour*. Apalachin, common, *Fenno*.

Euphorbia oerollata. Sayre, common, *Barbour*. Athens, *Murray*.

Euphorbia lucida Waldst. and Kit. According to a revision of this section of *Euphorbia*, the name of *E. Nicænsis* is to be replaced by the one here given.

Betula papyrifera. Above Lanesboro, a single tree, *Graves*.

Alnus incana. This species is by far the most plentiful in our territory.

Alnus rugosa. Abundant at Mutton Hill Pond, *Fenno*.

Quercus platanoïdes. Apalachin and Smithboro, *Fenno*.

Quercus ilicifolia. Frequent in Tioga county, *Fenno*. Spanish Hill, not common, *Barbour*.

Corylus Americana. Rather common in Susquehanna county, *Graves*.

Ceratophyllum demersum. Sayre, *Barbour*.

Larix laricina. Swamps at VanEtten, not common, *Barbour*.

Juniperus Virginiana. VanEtten and Towanda, *Barbour*.

- Abies balsamea*. Near Elmira, *Lucy*.
- Achroanthos monophylla*. Bear Swamp, *Graves*.
- Achroanthos unifolia*. Roadsides near Coxtown Pond, plentiful at this locality, *Clute*.
- Leptorchis Loeslii*. Near Apalachin, *Fenno*.
- Corallorhiza odontorhiza*. Near Apalachin, *Fenno*.
- Habenaria bracteata*. Athens, rare, *Barbour*.
- Habenaria Hookeriana*. Woods near Barton, *Fenno*. Athens, *Murray*. Sayre, *Miss Orie E. Croop*.
- Habenaria orbiculata*. Woods near Barton, *Fenno*.
- Habenaria lacera*. Mutton Hill Pond; Marshland, *Fenno*.
- Habenaria grandifolia*. VanEtten, *Barbour*.
- Allium cernuum*. Sayre, abundant, *Barbour*.
- Erythronium albidum*. Along the Susquehanna, rare, *Murray*.
- Juncus nodosus*. Plentiful, *Fenno*.
- Juncus Canadensis*. Common in swamps, *Fenno*.
- Pontederia cordata*. Spruce Pond, Wayne county, *Clute*.
- Oronticum aquaticum*. Spruce and Coxtown ponds, Wayne county; Marsh Pond, Broome county, *Clute*.
- Sagittaria graminea*. In the Susquehanna at Sayre, not common, *Barbour*.
- Scheuchzeria palustris*. Marsh Pond, Broome county, *Clute*.
- Potamogeton perfoliatus*. Susquehanna river at Sayre, common, *Barbour*. Apalachin, *Fenno*.
- Potamogeton crispus*. Sayre, *Barbour*.
- Potamogeton zosteræfolius*. Susquehanna at Sayre, *Barbour*. Apalachin, *Fenno*.
- Potamogeton pectinatus*. Susquehanna at Sayre, *Barbour*. Apalachin, *Fenno*.
- Eriocaulon septangulare*. Spruce Pond, Coxtown Pond, Wrighter's Pond, Carmalt Lake, common, *Clute*.
- Cyperus rivularis*. Shores of the Susquehanna at Sayre, *Barbour*.

Najas flexilis. Occasional in the Susquehanna, *Fenno*. Chemung, *Lucy*.

Eleocharis palustris. Sayre, common, *Barbour*.

Scirpus polyphyllus. Sayre, common, *Barbour*. Frequent, *Fenno*. Chemung county, *Lucy*.

Cyperus aristatus. Common along the river, *Fenno*.

Rhynchospora alba. Cinnamon Lake, *Lucy* and *Barbour*. Marsh Pond, *Graves*.

Cladium mariscoides. Cinnamon Lake, *Lucy* and *Barbour*.

Carex monile. Common in swamps, *Fenno*.

Carex prasina. Woods at Apalachin, *Fenno*.

Carex tenella. Swamps near Campville, *Fenno*.

Carex laxiculmis. Common, *Fenno*.

Carex cephaloidea. Common, *Fenno*.

Carex straminea festucacea. Apalachin, *Fenno*.

Panicum xanthophysum. Campville, rare, *Fenno*.

Eatonia Dudleyi. Apalachin, *Fenno*. Sullivan Hill, *Lucy*.

Muhlenbergia sylvatica. Sayre, *Barbour*.

Muhlenbergia diffusa. Newark Valley, *Barbour*.

Eragrostis hypnoides. Along the river at Sayre, *Barbour*.

Eragrostis major. Sayre, *Barbour*.

Eragrostis Carolinana. Roadsides, *Barbour*.

Lolium perenne. Sayre in yards, *Barbour*.

Camptosorus rhizophyllus. Towanda, *Barbour*. Plentiful along upper Starrucca creek, *Clute*.

Cystopteris bulbifera. Plentiful along Starrucca creek, *Clute*.

Botrychium matricariaefolium. Sayre, very rare, *Barbour*. Ararat Summit, abundant, *C. F. Saunders*.

Botrychium lanceolatum. Van Etten, *Barbour*. Ararat Summit, abundant, *C. F. Saunders*.

Lycopodium annotinum. Ararat Summit; Minkler's Pond, *Clute*.

Selaginella apus. Sayre, *Barbour*.

Isoetes Engelmanni. Plentiful on river shores west of Susquehanna, *Clute*.

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